

Mailbox: 9B01; Exr Room: 9B05

Sc

## SEARCH REQUEST FORM

Date:

6/21/02

Requester's Full Name:

DAVID LUKTON

Examiner #:

71263

Art Unit:

1653

Phone (308)

3213

Serial Number:

09/594478

Results Format Preferred (circle):

PAPER

DISK

E-MAIL

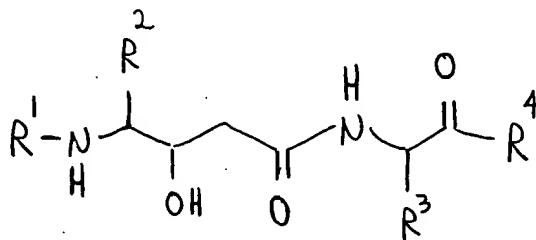
Title of Invention: Dipeptide inhibitors of beta-secretase

Applicants: JOHN, VARGHESE; TUNG, JAY; HOM, ROY; GUINN, ASHLEY.; FANG, LAWRENCE; GAILUNAS, ANDREA; MAMO, SHUMEYE S.

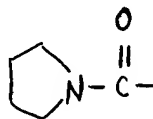
Earliest Priority Date: 6/15/99

\* \* \* \*

Applicants are claiming the compounds below

[" $\phi$ " represents phenyl; "chxl" represents cyclohexyl]RECEIVED  
JUN 21 2002  
STICR1 =  $\phi$ -CO- or benzyl

or

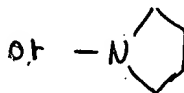


R2 = alkyl or benzyl

R3 = alkyl

R4 is any of the following: -OH or -OCH<sub>3</sub> or -OC<sub>2</sub>H<sub>5</sub>or NH- $\phi$  or NH-CH<sub>2</sub>- $\phi$  or -O- $\phi$  or -OCH<sub>2</sub>- $\phi$  or -O-CH<sub>2</sub>-CH<sub>2</sub>- $\phi$ 

or -HN-chxl or -O-chxl



## STAFF USE ONLY

Searcher: \_\_\_\_\_

Searcher Phone #: \_\_\_\_\_

Searcher Location: \_\_\_\_\_

Date Searcher Picked Up: \_\_\_\_\_

Date Completed: 6/25/02

Searcher Prep &amp; Review Time: \_\_\_\_\_

Online Time: \_\_\_\_\_

## Type of Search

\_\_\_\_ NA Sequence (#)

\_\_\_\_ AA Sequence (#)

\_\_\_\_ Structure (t)

\_\_\_\_ Bibliographic

\_\_\_\_ Litigation

\_\_\_\_ Fulltext

\_\_\_\_ Other

## Vendors and Cost

\_\_\_\_ STN \_\_\_\_\_ Dialog

\_\_\_\_ Questel/Orbit \_\_\_\_\_ Dr.Link

\_\_\_\_ Lexis/Nexis \_\_\_\_\_ Westlaw

\_\_\_\_ WWW/Internet

\_\_\_\_ In-house sequence systems (list)

\_\_\_\_ Other (specify)

=&gt; fil hcaplus

FILE 'HCAPLUS' ENTERED AT 20:11:00 ON 21 JUN 2002

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FILE COVERS 1907 - 21 Jun 2002 VOL 136 ISS 25

FILE LAST UPDATED: 19 Jun 2002 (20020619/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

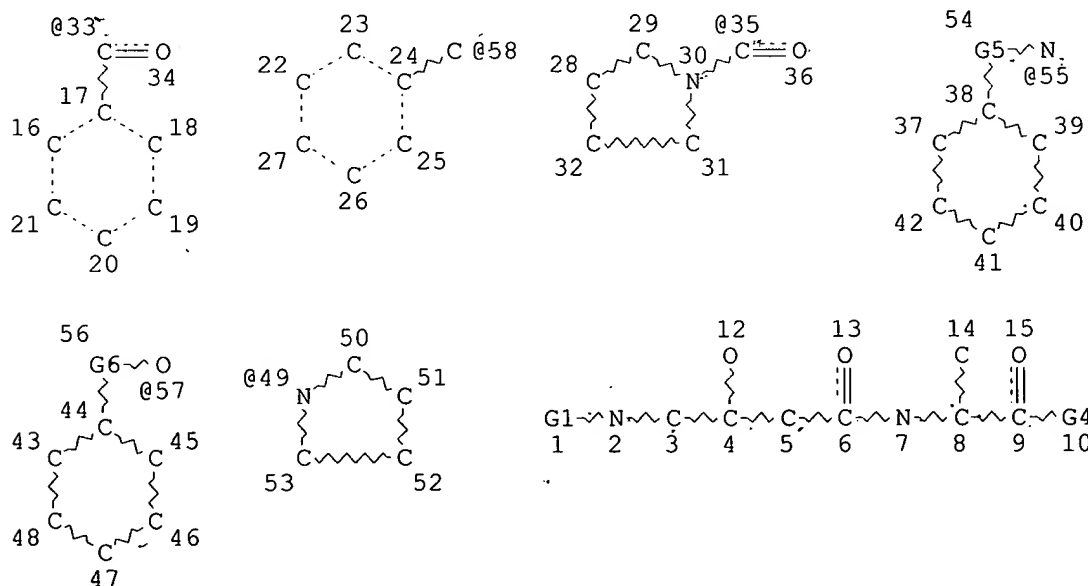
CAS roles have been modified effective December 16, 2001. Please check your SDI profiles to see if they need to be revised. For information on CAS roles, enter HELP ROLES at an arrow prompt or use the CAS Roles thesaurus (/RL field) in this file.

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L12 STR



VAR G1=33/58/35

VAR G4=OH/MEO/ETO/55/57/49

REP G5=(0-1).CH2

REP G6=(0-2).C

NODE ATTRIBUTES:  
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 DEFAULT ECLEVEL IS LIMITED

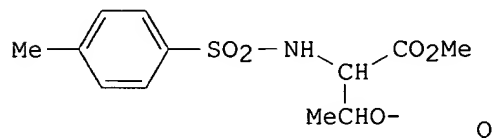
GRAPH ATTRIBUTES:  
 RING(S) ARE ISOLATED OR EMBEDDED  
 NUMBER OF NODES IS 57

STEREO ATTRIBUTES: NONE  
 L14 2 SEA FILE=REGISTRY SSS FUL L12  
 L15 1 SEA FILE=HCAPLUS ABB=ON PLU=ON L14

=>  
 =>  
 => d ibib abs hitrn l15 1

L15 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2002 ACS  
 ACCESSION NUMBER: 1991:559804 HCAPLUS  
 DOCUMENT NUMBER: 115:159804  
 TITLE: Preparation of 4-amino-3-hydroxybutyric acid  
 residue-containing peptides as renin inhibitors  
 INVENTOR(S): Bender, Wolfgang; Kinast, Guenther; Knorr, Andreas;  
 Stasch, Johannes Peter  
 PATENT ASSIGNEE(S): Bayer A.-G., Fed. Rep. Ger.  
 SOURCE: Eur. Pat. Appl., 116 pp.  
 CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 412350	A2	19910213	EP 1990-114115	19900724
EP 412350	A3	19920325		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE				
DE 4004820	A1	19910425	DE 1990-4004820	19900216
US 5095006	A	19920310	US 1990-553493	19900713
CA 2022692	AA	19910206	CA 1990-2022692	19900803
AU 9060193	A1	19910207	AU 1990-60193	19900803
HU 54386	A2	19910228	HU 1990-4886	19900803
JP 03081256	A2	19910405	JP 1990-206686	19900803
DD 299191	A5	19920402	DD 1990-343239	19900803
ZA 9006125	A	19920826	ZA 1990-6125	19900803
US 5242903	A	19930907	US 1991-771077	19911002
PRIORITY APPLN. INFO.:			DE 1989-3926021	19890805
			DE 1990-4004820	19900216
			US 1990-553493	19900713
OTHER SOURCE(S):			MARPAT 115:159804	
GI				



AB X-A-B-D-E-CO-CH[(CH<sub>2</sub>)<sub>m</sub>R<sub>1</sub>]CH(OH)-L [I; X = EtOCOCHPhO, Q, OH, alkoxy, PhCH<sub>2</sub>O, (substituted) amino, etc.; A, B, D, E = bond, retro-amino acid residue, e.g., retro-D-Phe; etc.; m = 0, 1, 2; L = (substituted) aminomethyl, (N-substituted) pyrrolidin-2-yl; R<sub>1</sub> = (cyclo)alkyl, (substituted) aryl] were prepd. E.g., PhCH<sub>2</sub>CH<sub>2</sub>CO<sub>2</sub>CH<sub>2</sub>Ph (prepn. given) in THF contg. (Me<sub>2</sub>CH)<sub>2</sub>NH and BuLi was treated with OCHCH<sub>2</sub>Q<sub>1</sub> [Q<sub>1</sub> = phthalimido] 60 min at -70.degree. to give, after work-up, I [X = PhCH<sub>2</sub>O, R<sub>1</sub> = Ph, m = 1, L = CH<sub>2</sub>Q<sub>1</sub>, A = B = D = E = bond]. I [X = PhCH<sub>2</sub>O, R<sub>1</sub> = Ph, m = 1, L = CH<sub>2</sub>Q<sub>1</sub>, A = retro-D-Phe, B = retro-D-His, D = E = bond] (prepn. given) at 0.05 mg/mL showed 100% inhibition of plasma renin. The IC<sub>50</sub> values of I ranged from 10<sup>-4</sup> to 10<sup>-9</sup>M.

IT 136158-92-4P 136158-93-5P

RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)  
(prepn. of, as renin inhibitor)

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=>

=> fil caold

FILE 'CAOLD' ENTERED AT 20:11:19 ON 21 JUN 2002

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FILE COVERS 1907-1966

FILE LAST UPDATED: 01 May 1997 (19970501/UP)

This file contains CAS Registry Numbers for easy and accurate substance identification. Title keywords, authors, patent assignees, and patent information, e.g., patent numbers, are now searchable from 1907-1966. TIFF images of CA abstracts printed between 1907-1966 are available in the PAGE display formats.

This file supports REGISTRY for direct browsing and searching of all substance data from the REGISTRY file. Enter HELP FIRST for more information.

=>

=>

=> s l14

L16 0 L14

=> fil reg

FILE 'REGISTRY' ENTERED AT 20:11:26 ON 21 JUN 2002

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STRUCTURE FILE UPDATES: 19 JUN 2002 HIGHEST RN 432491-02-6

DICTIONARY FILE UPDATES: 19 JUN 2002 HIGHEST RN 432491-02-6

TSCA INFORMATION NOW CURRENT THROUGH January 7, 2002

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Calculated physical property data is now available. See HELP PROPERTIES for more information. See STN Note 27, Searching Properties in the CAS Registry File, for complete details:

<http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf>

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L14 ANSWER 1 OF 2 REGISTRY COPYRIGHT 2002 ACS

RN 136158-93-5 REGISTRY

CN D-Histidine, N-[4-[[[(1,1-dimethylethoxy)carbonyl](phenylmethyl)amino]-3-hydroxy-1-oxo-2-(phenylmethyl)butyl]- (9CI) (CA INDEX NAME)

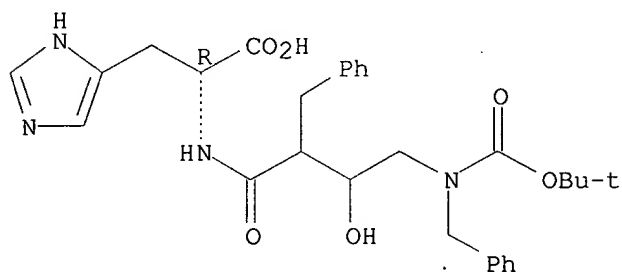
FS STEREOSEARCH

MF C29 H36 N4 O6

SR CA

LC STN Files: CA, CAPLUS, USPATFULL

Absolute stereochemistry.



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1967 TO DATE)

1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 115:159804

L14 ANSWER 2 OF 2 REGISTRY COPYRIGHT 2002 ACS

RN 136158-92-4 REGISTRY

CN D-Histidine, N-[4-[[[(1,1-dimethylethoxy)carbonyl](phenylmethyl)amino]-3-hydroxy-1-oxo-2-(phenylmethyl)butyl]-, methyl ester (9CI) (CA INDEX NAME)

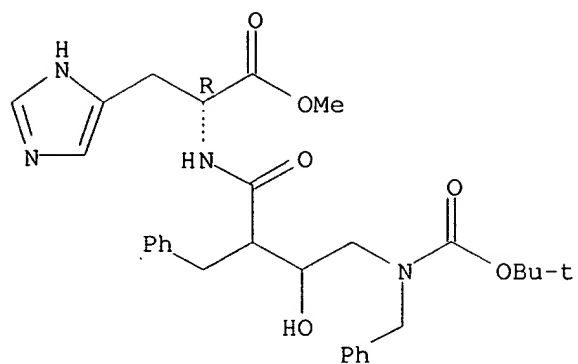
FS STEREOSEARCH

MF C30 H38 N4 O6

SR CA

LC STN Files: CA, CAPLUS, USPATFULL

Absolute stereochemistry.



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1967 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

REFERENCE 1: 115:159804